IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of   Atty. Docket

JOSEPHUS A.H.M. KAHLMAN ET AL   NL000711

Serial No.

Filed: CONCURRENTLY

Title: DIGITAL TRANSMISSION SYSTEM HAVING DISPARITY DEPENDENT
CHANNEL CODE WORDS

Commissioner for Patents
Washington, D.C.   20231

PRELIMINARY AMENDMENT

Sir:

Prior to calculation of the filing fee and examination, please
amend the above-identified application as follows, where marked-up
version of the amended claims 3, 6, 7, 8, 9, is attached as
Appendix A:

IN THE CLAIM

Please amend the claim as follows:

3.   The digital transmission system (1) according to claim 1,

characterized in that the encoder (5) and/or decoder (6)

comprise(s) a look-up table (10,; 11) containing data about the

levels of the multilevel input signal corresponding to code words

of the DC-balanced digital channel code.

6.   The digital transmission system (1) according to claim 1,

characterized in that one or more of the not selected code words is

used as a synchronization word.

7.   A transmitter (2) suited for application in a digital

transmission system (1) according to claim 1, the digital

transmission system (1) comprising: a transmitter (2), a receiver

(3), and a transmission channel (4) coupled to both the transmitter

(2) and the receiver (3), whereby the transmitter (2) is provided

with an encoder (5) wherein a multilevel input signal is encoded

such, that an encoded DC-balanced digital channel code is

transmitted to the receiver (3), characterized in that the encoder

(5) is embodied to match levels of the multilevel input signal to

code words of the DC-balanced digital channel code such, that

disparities of the selected code words are symmetrically grouped

around zero disparity.

8.   A receiver (3) suited for application in a digital

transmission system (1) according to claim 1, the digital

transmission system (1) comprising: a transmitter (2), a receiver

(3), and a transmission channel (4) coupled to both the transmitter

(2) and the receiver (3), whereby the receiver (3) is provided with

a decoder (6), wherein a received encoded DC-balanced digital

channel code is a decoded into a multilevel output signal,

characterized in that the decoder (6) is embodied to decode the

received DC-balanced digital channel code words, whose disparities

are symmetrically grouped around zero disparity.

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37   9. A digital code word set for application in the digital

38   transmission system (1) according to claim 1, comprising code words

39   having disparities, characterized in that the disparities of the

40   code words are symmetrically grouped around zero disparity.

REMARKS

The foregoing amendment to the claims was made solely to avoid filing the claim in the multiple dependent form so as to avoid the additional filing fee.

The claim was not amended in order to address issues of patentability and Applicants respectfully reserves all rights they may have under the Doctrine of Equivalents. Applicants furthermore reserves their right to reintroduce subject matter deleted herein at a later time during the prosecution of this application or continuing applications.

Respectfully submitted,

By _Michael E Belk_

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Version with Markings
to Show Changes Made to the Claim

The following are marked up versions of amended claim 6:

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3   3.   The digital transmission system (1) according to claim 1

4   ~~or 2~~, characterized in that the encoder (5) and/or decoder (6)

5   comprise(s) a look-up table (10,~~;~~ 11) containing data about the

6   levels of the multilevel input signal corresponding to code words

7   of the DC-balanced digital channel code.

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10   6.   The digital transmission system (1) according to ~~one of~~

11   ~~the claims 1-5~~ <u>claim 1</u>, characterized in that one or more of the

12   not selected code words is used as a synchronization word.

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14   7.   A transmitter (2) suited for application in a digital

15   transmission system (1) according to ~~one of the claims 1-6~~ <u>claim 1</u>,

16   the digital transmission system (1) comprising: a transmitter (2),

17   a receiver (3), and a transmission channel (4) coupled to both the

18   transmitter (2) and the receiver (3), whereby the transmitter (2)

19   is provided with an encoder (5) wherein a multilevel input signal

20   is encoded such, that an encoded DC-balanced digital channel code

21   is transmitted to the receiver (3), characterized in that the

22   encoder (5) is embodied to match levels of the multilevel input

23   signal to code words of the DC-balanced digital channel code such,

24   that disparities of the selected code words are symmetrically

25   grouped around zero disparity.

26

27   8.   A receiver (3) suited for application in a digital

28   transmission system (1) according to ~~one of the claims 1-6~~ <u>claim 1</u>,

29   the digital transmission system (1) comprising: a transmitter (2),

30   a receiver (3), and a transmission channel (4) coupled to both the

31   transmitter (2) and the receiver (3), whereby the receiver (3) is

32   provided with a decoder (6), wherein a received encoded DC-balanced

33   digital channel code is a decoded into a multilevel output signal,

34   characterized in that the decoder (6) is embodied to decode the

35   received DC-balanced digital channel code words, whose disparities

36   are symmetrically grouped around zero disparity.

37

38   9.   A digital code word set for application in the digital

39   transmission system (1) according to ~~one of the claims 1-6~~ <u>claim 1</u>,

40   comprising code words having disparities, characterized in that the

41   disparities of the code words are symmetrically grouped around zero

42   disparity.